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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,068	03/16/2004	Albert S. Wang	MS1-801USC6	5179

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EXAMINER	
DIEP, NHON THANH	
ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/803,068	WANG, ALBERT S.	
	Examiner	Art Unit	
	Nhon T Diep	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *13,29,45 and 49-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13,29,45 and 49-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/16/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 13, 29, 45, 49-53 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,707,852. Although the conflicting claims are not identical, they are not patentably distinct from each other because the invention being claimed is a broader recitation of the same invention being claimed in the above US Patent. Therefore, the

application claims are encompassed by the above patent. A terminal disclaimer is required so as to insure that, were the application to mature into a patent, both patents would be commonly owned in their lifetimes.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 13 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada (US 5,729,295), in view of Shahraray (US 6,055,025).

Okada discloses a method for encoding a motion video signal, the method comprising: determining whether the second frame represents a scene change in a motion video image represented by the motion video image; encoding the second frame as an independent frame upon a condition in which the second frame represents the scene change in the motion video image; and encoding the second frame as a motion-compensated frame upon a condition in which the second frame does not represent the scene change in the motion video image (fig. 9, el. 47 and column 11, lines 29-37) as specified in claim 13. It is noted that Okada does not particularly disclose the comparing first and second frames of the motion video signal to one another for the : determining whether the second frame represents a scene change in a motion video image as specified in claim 13. Shahraray teaches "block matching is performed between the current frame and the Dth previous frame to determine match signals that

represent the likelihood that the regions of the first frame contain visual information substantially similar to respective matching regions of the second frame. The match signals are ordered beginning with the match signals defining the best match and ending with the match signals defining the worst match. The first S match signals are selected and averaged together, to obtain an instantaneous match (IM) signal S is user definable and is greater than zero and less than or equal to the number of regions into which each frame is divided. The IM signal provides a criteria for determining whether the first frame belongs to a scene different from the second frame. Finally, a scene change is indicated when the IM signal meets certain decision criteria. " as claimed in claims 13 and 50. Therefore it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Okada by using the block matching technique between the present frame and the previous frame for the determining of scene change as taught by Shahraray. Doing so would help to obtain better results.

5. Claims 29, 45, 49 and 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada (US 5,729,295) and Shahraray as applied to claim 13 above, and further in view of Kumazawa et al (US 5,815,217).

As applied to claims 13 and 50 above, it is noted that the combination of Okada (US 5,729,295) and Shahraray does not particularly disclose the using of computer and software to process the method as claimed in claim 13. Kumazawa et al teaches the detection and processing of motion video signal can be realized with software processing using a CPU 17 of general use as shown in the block diagram shown in FIG.

4. In other words, a moving image encoder 18 composed of the frame memory 1, the subtracter 2, quantizer 4, entropy encoder 5, adder 7, etc. is connected to a bus 19 of the CPU 17, and the prediction error between frames which is necessary for the scene-change detection can be read from the CPU 17. The CPU 17 realizes an operator, a counter and a comparator, that is, a scene-change detection mechanism, following a program stored in a memory 20. Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the system of Okada by using computer and software to process the detection and coding of video signals as taught by Kumazawa et al. Doing so would help to expedite the process.

With regard to claims 51 and 53: The examiner takes Official Notice that the using of an absolute pixel difference in determining the difference between two frames of digitized video images is well known in the art and therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to use an absolute pixel difference as a matter of designer's choice in finding the difference between to frames

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Yawasaki (US 6,163,574) discloses a motion picture encoding system for either intra-frame encoding or interframe encoding.

b. Hatano et al (US 6,480,670) discloses a video signal encoding method and system.

c. Yamauchi (6,678,324) discloses an image information encoding system.

d. Etoh (US 6,081,551) discloses an image coding and decoding apparatus and method thereof.

e. Matsuura et al (US 6,011,589) discloses a picture coding device where the quantization step size is adjusted in response to a motion vector.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhon T Diep whose telephone number is 703-305-4648. The examiner can normally be reached on m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S Kelley can be reached on 703 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ND
1/21/2005

NHON DIEP
PRIMARY EXAMINER